

34. (Amended) The method of claim 5, wherein said reducing agent is a dithionite ion, a stannous ion or a ferrous ion.

## REMARKS

### I. Claims in the Case

Claim 33 has been canceled without prejudice. Claim 5 has been amended to place it into independent format. Claims 2, 3 and 34 have been amended to change their dependencies to depend from independent claim 5. Claims 2-32, 34-41, and 52-55 are currently pending.

### II. Remarks

In the subject Action, the section 103 rejection of claims 2, 3, 33 and 34 was maintained, and the remaining claims were objected to as depending from a rejected base claim. While the Applicants continue to maintain that the subject matter of all of the previously pending claims is patentable, and reserves the right to seek protection for the broader subject matter in related cases, the claims have been amended to place the case into condition for allowance. Thus, rejected base claim 33 has been canceled, claim 5 has been placed into independent format and claims 2, 3 and 34 have been amended to depend from new base claim 5. All of the claims should now be in condition for allowance.

Respectfully submitted,

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## Marked Claim Amendments

2. (Amended) The method of claim 533, wherein said tissue specific is conjugated to said ethylenedicysteine on both acid arms of the ethylenedicysteine.

3. (Amended) The method of claim 533, wherein said radionuclide is  $^{99m}\text{Tc}$ ,  $^{188}\text{Re}$ ,  $^{186}\text{Re}$ ,  $^{183}\text{Sm}$ ,  $^{166}\text{Ho}$ ,  $^{90}\text{Y}$ ,  $^{89}\text{Sr}$ ,  $^{67}\text{Ga}$ ,  $^{68}\text{Ga}$ ,  $^{111}\text{In}$ ,  $^{183}\text{Gd}$ ,  $^{59}\text{Fe}$ ,  $^{225}\text{Ac}$ ,  $^{212}\text{Bi}$ ,  $^{211}\text{At}$ ,  $^{64}\text{Cu}$  or  $^{62}\text{Cu}$ .

5. (Amended) A method of synthesizing a radiolabeled ethylenedicysteine derivative for imaging comprising the steps:

- a) obtaining a tissue specific ligand;
- b) admixing said ligand with ethylenedicysteine (EC) to obtain an EC-tissue specific ligand derivative; and
- c) admixing said EC-tissue specific ligand derivative with a radionuclide and a reducing agent to obtain a radionuclide labeled EC-tissue specific ligand derivative, wherein the EC forms an  $\text{N}_2\text{S}_2$  chelate with the radionuclide;

~~The method of claim 35,~~ wherein said tissue specific ligand is an anticancer agent, DNA topoisomerase inhibitor, antimetabolite, tumor marker, folate receptor targeting ligand, tumor apoptotic cell targeting ligand, tumor hypoxia targeting ligand, DNA intercalator, receptor marker, peptide, nucleotide, organ specific ligand, antibiotic, antifungal, antibody, glutamate pentapeptide or an agent that mimics glucose.

34. (Amended) The method of claim 533, wherein said reducing agent is a dithionite ion, a stannous ion or a ferrous ion.